

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/SE 2005/000195

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: G06K 9/00

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: G06K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ INSPEC COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5633948 A (KEGELMEYER, JR, W P), 27 May 1997 (27.05.1997), column 1, line 59 - column 2, line 13; column 2, line 28 - column 3, line 15; column 5, line 18 - column 8, line 34, figures 2,4, abstract  --	1-3,13-16
A	US 5661820 A (KEGELMEYER, JR, W P), 26 August 1997 (26.08.1997), the whole document  --	1-3,13-16
A	US 6263092 B1 (ROEHRIG, J RET AL), 17 July 2001 (17.07.2001), the whole document  --	1-3,13-16

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family

Date of the actual completion of the international search

5 July 2005

Date of mailing of the international search report

11 -07- 2005

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p data-bbox="181 175 683 217">US 20030062414 A1 (TSIKOS, C J ET AL), 3 April 2003 (03.04.2003), the whole document</p> <p data-bbox="393 236 476 269">-- -----</p>	1-3,13-16

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

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US	5633948	A	27/05/1997	US	5661820	A	26/08/1997
US	5661820	A	26/08/1997	US	5633948	A	27/05/1997
US	6263092	B1	17/07/2001	US	6198838	B	06/03/2001
				US	6640001	B	28/10/2003
				US	20020003894	A	10/01/2002
				US	20020141627	A	03/10/2002
				US	5815591	A	29/09/1998
				WO	9963478	A	09/12/1999

INTERNATIONAL SEARCH REPORT  
Information on patent family members

International application No.

PCT/SE 2005/000195

US 20030062414 A1	03/04/2003	AU 760619 B	22/05/2003
		AU 5084199 A	17/01/2000
		CA 2335888 A	06/01/2000
		EP 1100576 A	23/05/2001
		US 6837432 B	04/01/2005
		US 6739511 B	25/05/2004
		US 6827265 B	07/12/2004
		US 6830184 B	14/12/2004
		US 6830185 B	14/12/2004
		US 6851610 B	08/02/2005
		US 6857570 B	22/02/2005
		US 6863216 B	08/03/2005
		US 6877662 B	12/04/2005
		US 6880756 B	19/04/2005
		US 20030001010 A	02/01/2003
		US 20030010825 A	16/01/2003
		US 20030015588 A	23/01/2003
		US 20030019931 A	30/01/2003
		US 20030019932 A	30/01/2003
		US 20030019933 A	30/01/2003
		US 20030024987 A	06/02/2003
		US 20030034387 A	20/02/2003
		US 20030034395 A	20/02/2003
		US 20030034396 A	20/02/2003
		US 20030035460 A	20/02/2003
		US 20030035461 A	20/02/2003
		US 20030038179 A	27/02/2003
		US 20030042303 A	06/03/2003
		US 20030042304 A	06/03/2003
		US 20030042309 A	06/03/2003
		US 20030042314 A	06/03/2003
		US 20030042315 A	06/03/2003
		US 20030047597 A	13/03/2003
		US 20030052169 A	20/03/2003
		US 20030052175 A	20/03/2003
		US 20030053513 A	20/03/2003
		US 20030062415 A	03/04/2003
		US 20030071119 A	17/04/2003
		US 20030071122 A	17/04/2003
		US 20030071123 A	17/04/2003
		US 20030071124 A	17/04/2003
		US 20030071128 A	17/04/2003
		US 20030080190 A	01/05/2003
		US 20030080192 A	01/05/2003
		US 20030085280 A	08/05/2003
		US 20030085281 A	08/05/2003
		US 20030089778 A	15/05/2003
		US 20030089779 A	15/05/2003
		US 20030091244 A	15/05/2003
		US 20030094495 A	22/05/2003
		US 20030098349 A	29/05/2003
		US 20030098352 A	29/05/2003
		US 20030098353 A	29/05/2003
		US 20030102379 A	05/06/2003
		US 20030218070 A	27/11/2003

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/SE 2005/000195

US 20030062414 A1	03/04/2003	US 20030222148 A	04/12/2003
		US 20040238637 A	02/12/2004
		AU 1984802 A	03/06/2002
		EP 1344180 A	17/09/2003
		US 20020145042 A	10/10/2002
		WO 0243195 A	30/05/2002
		US 6732929 B	11/05/2004
		US 6736321 B	18/05/2004
		US 20020139853 A	03/10/2002
		US 20020153422 A	24/10/2002
		US 20020195496 A	26/12/2002
		US 20030042308 A	06/03/2003
		US 20030146282 A	07/08/2003
		US 20030150916 A	14/08/2003
		US 20030150917 A	14/08/2003
		US 20030189098 A	09/10/2003
		US 6830189 B	14/12/2004
		US 20020043561 A	18/04/2002
		US 6742707 B	01/06/2004
		US 20050023353 A	03/02/2005
		US 6629641 B	07/10/2003
		US 20020117545 A	29/08/2002
		US 20050017074 A	27/01/2005
		US 6631842 B	14/10/2003
		US 6742711 B	01/06/2004
		US 6764008 B	20/07/2004
		US 6786414 B	07/09/2004
		US 6837437 B	04/01/2005
		US 20020185535 A	12/12/2002
		US 20020195494 A	26/12/2002
		US 20030010823 A	16/01/2003
		US 20030015587 A	23/01/2003
		US 20030209602 A	13/11/2003
		US 20040065736 A	08/04/2004
		AU 772459 B,C	29/04/2004
		AU 3204199 A	18/10/1999
		AU 2004201888 A	00/00/0000
		CA 2325527 A	30/09/1999
		CN 1302417 A,T	04/07/2001
		EP 1066587 A	10/01/2001
		US 6354505 B	12/03/2002
		US 6360947 B	26/03/2002
		US 6382515 B	07/05/2002
		US 6422467 B	23/07/2002
		US 6457642 B	01/10/2002
		US 6481625 B	19/11/2002
		US 6499661 B	31/12/2002
		US 6517004 B	11/02/2003
		US 6527186 B	04/03/2003
		US 6540139 B	01/04/2003
		US 6554189 B	29/04/2003
		US 6572018 B	03/06/2003
		US 6581835 B	24/06/2003
		US 6588663 B	08/07/2003
		US 6588665 B	08/07/2003

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US	20030062414	A1	03/04/2003	US	6616040	B	09/09/2003
				US	6616048	B	09/09/2003
				US	6619550	B	16/09/2003
				US	6629640	B	07/10/2003
				US	6705526	B	16/03/2004
				US	6705528	B	16/03/2004
				US	20010015380	A	23/08/2001
				US	20020000466	A	03/01/2002
				US	20020000467	A	03/01/2002
				US	20020000469	A	03/01/2002
				US	20020014533	A	07/02/2002
				US	20020047048	A	25/04/2002
				US	20020179716	A	05/12/2002
				US	20030006289	A	09/01/2003
				US	20030234290	A	25/12/2003
				US	20040069854	A	15/04/2004
				US	20040074968	A	22/04/2004
				US	20050098631	A	12/05/2005
				WO	9949411	A	30/09/1999
				AU	3909000	A	09/10/2000
				WO	0057348	A	28/09/2000
				US	6494377	B	17/12/2002
				AU	5326600	A	28/12/2000
				CA	2376683	A	14/12/2000
				EP	1208521	A	29/05/2002
				US	20020179708	A	05/12/2002
				WO	0075856	A	14/12/2000

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**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

The following separate inventions were identified:

I: Claims 1-3 and 13-16 directed to a method for detecting a region of interest in a digitalized X-ray image.

II: Claims 4-12 and 17 directed to a method for detection of stellate lesions in a digitalized mammogram.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-3, 13-16

**Remark on Protest**

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.